

AMPEX

Color Video
Production
Recorder

AMPEX VPR5000

VPR-5800/5803



**Now from
Ampex
...the finest,
most versatile
low-cost color teleproduction
recorder**

THE AMPEX VPR-5800/5803* . . . IT OPENS UP AN EXCITING NEW WORLD OF CCTV, CATV TELEPRODUCTION CREATIVITY

This Ampex achievement offers CCTV operators an impressive array of teleproduction capabilities never before available at such remarkably low cost.

It does this by bringing you the exclusive versatility of the Ampex electronic assemble and insert editing format plus an exciting combination of new features assuring the utmost in operational efficiency, ease and dependability.

The superb VPR-5800/5803—one of the dramatic new generation of Ampex Video Production Recorders—has been designed and engineered throughout to meet the requirements of those who want all the following advantages in a compact, easy-to-operate unit:

- An outstanding production-quality 1" format recorder featuring exceptional video/audio editing, record and playback capability in both color and black-and-white.
- Highly efficient components and electronic characteristics that assure master tapes and multi-generation dubs of excellent quality for the many CCTV applications that require duplicates.
- An instrument that, despite its advanced features for the production of professional-like presentations, is none-the-less designed for easy operation, even for those with relatively limited experience.

Featuring both color and black-and-white capability, the VPR-5800/5803 enables

the user to immediately implement the broad scope and flexibility that this dual record/playback capability makes possible. For those who might initially prefer an even lower cost black-and-white version only, however, Ampex offers the VPR-5800 unit which can be easily field upgraded to color at any time with the optional AC-141 color kit.

The VPR-5800/5803 is ideal for those who are already fairly well grounded in CCTV production work in schools, hospitals, businesses and government agencies—but where the need for more professional-like productions and improved picture quality and multi-generation duplicates has become increasingly apparent.

Most likely these individuals already have a small studio operation—some lights, props, a couple of cameras and other basic equipment—and are now eager to move on to the advanced teleproduction techniques that the VPR-5800 makes possible with such singular ease.

In the detailed descriptions of the many features of the VPR-5800/5803 shown on facing pages, it can be seen again how you get more from Ampex—the pioneer and leading manufacturer of television recording equipment.

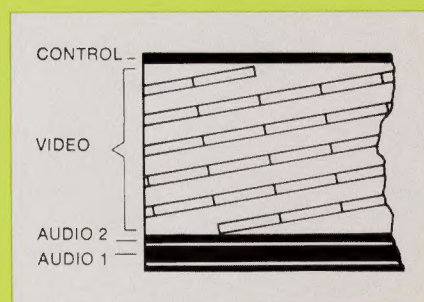
*VPR-5800 designates the 525/60 version; VPR-5803 is the 625/50 model.

the VPR-5800/5803 provides integrated capstan servoed insert and assemble editing—professional teleproduction tools at the touch of a fingertip

THE AMPEX 1" FORMAT GIVES YOU EXCLUSIVE 3-TRACK VIDEO/AUDIO EDITING VERSATILITY!

The independent 3-track Ampex 1" videotape format is the most flexible in the industry—and, as such, is an unparalleled creative teleproduction tool. It doesn't "lock" you in! You can quickly execute all the fresh and imaginative techniques you want to dramatize your productions. You can assemble or insert video or audio segments anywhere on the tape easily, electronically, flawlessly!

Here are some of the ways you can use the Ampex 3-track format to get the versatility that will add so importantly to the impact and effectiveness of all your videotape productions.



THREE INDEPENDENT TRACKS
1 VIDEO, 2 AUDIO . . . EACH CAN BE USED, ALTERED OR REPLACED WHEN AND AS YOU WISH

VIDEO TRACK—You can record the picture and sound together . . . or record only the picture, adding the sound later . . . or record only the audio, adding the picture later. You can insert or assemble new video segments alone, leaving the original audio intact.

AUDIO TRACK 1—On this track you can record program audio "live" as you tape video . . . shoot video as you listen to a pre-recorded sound track or narrative . . . assemble or insert new audio without changing the video track . . . or record voice-over after your video editing has been completed.

AUDIO TRACK 2—This lets you record location sound for later mix with 1st track program audio . . . lets you insert cueing directions that can be heard and followed by the crew while program video and sound are being recorded or for post-production editing sessions . . . and it's ideal for adding a second language for bi-lingual presentations.

Of major significance is the preciseness and smoothness of the edits. There is no distortion, no picture breakup at any point of change.

Moreover, the VPR-5800 will edit from any video signal source, including television cameras, other videotape recorders, film chains or television receivers.

PRECISION MINUTES AND SECONDS COUNTER



Another important Ampex video production feature! This tape-driven counter tells you exactly how far you are into the tape. And it does it not just in minutes and tenths of minutes, but in minutes and *seconds*. This enables you to quickly "key in" the precise tape location where the edit is to be made. Then, with the new preset tracking control, you simply observe the monitor, and go to "Record" for a smooth edit.

FLYING ERASE HEAD

When the VPR-5800/5803 is in video editing mode, the Ampex flying erase head clears the tape of all prior video information. All color edits are of superior quality, without the slightest trace of spurious interference.

PRESET TRACKING CONTROL

Now Ampex makes it easier than ever to get smooth, crisp edits every time! You can't go wrong! There's no need to "peak" a manual tracking control. The VPR-5800/5803 does it all automatically with a simple "set and forget" control.

ENGINEERED AND PRECISION-CRAFTED IN EVERY DETAIL—THE VPR-5800/5803 GIVES YOU THE FINEST FEATURES AND THE INDUSTRY'S HIGHEST PERFORMANCE SPECIFICATIONS FOR THIS CLASS OF RECORDER!

Now, in the remarkable VPR-5800/5803, you get all the advantages of the Ampex-developed one-inch, single-head, helical scan format, plus advanced performance features that make this unit the most versatile low-cost teleproduction recorder of its kind.

These are a few of the features and operating characteristics that are of special significance:

- The VPR-5800/5803's ferrite head, high carrier band width, superior electronics and 1000 ips writing speed (833 ips in PAL) assure crisp, sharp videotape masters, full-fidelity playback and multi-generation dubs of exceptional quality.
- The scanner assembly has a direct coupled dc motor servo system to assure consistently high servo system stability.
- Efficient and reliable integrated circuitry in the signal system combines with the Ampex patented FM video recording system to provide exceptional overall picture fidelity.
- Single-cable color output of the VPR-5800/5803 produces an NTSC or PAL type signal.
- An end-of-tape sensor automatically places the recorder in the stop mode when you reach the end of the tape.
- Slow motion aids in critical editing evaluation and, for instructional use, provides capability for close frame-by-frame study of surgical, manufacturing and similar videotaped procedures.
- All controls are designed and logically arranged on the front panel for smooth, easy, fool-proof operation. With just mini-

mal instruction, the trainee will become an experienced operator, able to quickly handle editing and all other functions.

ERROR-FREE AUTOMATIC SYNC SELECTOR

While the VPR-5800 normally operates on its internal sync source, it will also accept an external sync input. The unit automatically switches to external sync mode when the cable is plugged in, and reverts to internal sync when the cable is detached. This eliminates the risk of losing picture stability because the operator forgets to turn the usual manual sync switch to the changed operational mode.

HOT-PRESSED FERRITE VIDEO HEAD

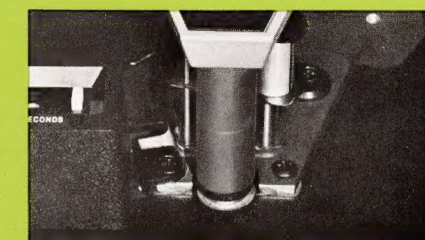
The VPR-5800/5803 has a new hot-pressed ferrite video record/reproduce head with a guaranteed life of 1000 hours or 90 days, whichever occurs first. Both it and the ferrite flying erase head are contained in newly designed modular assemblies offering exclusive push-out, push-in head replacement—the easiest and fastest in the industry.

EXCLUSIVE AMPEX SPLIT CAPSTAN

This Ampex capstan design, featured in all VPR recorders and players, gives Ampex units even greater capability to reproduce the finest possible videotape pictures.

Because there is almost always some variance between the levels of temperature and

humidity when a videotape is recorded and when it is played back, Ampex units have always had a "Tension" control to compensate for picture distortion due to tape stretch or contraction. Now, however, with the new split capstan design in which the top half is driven and the bottom half is viscously coupled, Ampex has doubled the correction effect of the tension control.



It's many small things like this that also add up to the big Ampex difference in performance and reliability.

AMPEX REEL "HOLD-DOWNS"

Ampex reel "Hold-Downs" can be quickly engaged or released with the turn of your wrist. Because they keep both reels snugly and securely in position, operation is quieter and smoother during fast forward and rewind modes, and reels can be left in place while the machine is being transported.

IT'S WISE TO GET AMPEX 1" TAPE COMPATIBILITY

The VPR-5800/5803 incorporates the identical one-inch, single-head, helical scan format featured in all Ampex 1" models. It will play tapes recorded on other Ampex 1" units . . . and vice versa.

Here's why this tape interchangeability is so important: Ampex offers the industry's most complete line of equipment . . . thousands of 1" Ampex units are in daily use . . . and, in fact, the Ampex format is considered the "standard" by many producers of programming materials.





SPECIFICATIONS

VPR-5800 NTSC-525/60

VPR-5803 PAL-625/50

GENERAL

POWER REQUIREMENTS:	105 to 125 volts, 60 Hz at 2½ amps. Detachable 3-wire power cable and plug.	105-125 volts @ 2.5 amps, 50 Hz, or 200-250 volts @ 1.25 amps, 50 Hz, Detachable 3-wire power cable and plug.
TAPE SPEED:	9.6 ips.	9.45 ips.
VIDEO WRITING SPEED:	1000 ips.	833 ips.
ROTARY HEAD LIFE:	1000 hrs. min. or 90 days, whichever occurs first. Uses 2 plug-in field interchangeable ferrite heads, 1 video record/reproduce, 1 video erase.	1000 hrs. min. or 90 days, whichever occurs first. Uses 2 plug-in field interchangeable ferrite heads, 1 video record/reproduce, 1 video erase.
REWIND TIME:	4½ minutes (for 3000 ft. of tape.)	4½ minutes (for 3000 ft. of tape.)
FAST FORWARD TIME:	5 minutes (for 3000 ft. of tape.)	5 minutes (for 3000 ft. of tape.)
REMOTE CONTROL FACILITY:	Remote control connections available for play, record and stop at back panel for use with remote control device. Remote connector also provides interface connections for dubbing.	Remote control connections available for play, record and stop at back panel for use with remote control device. Remote connector also provides interface connections for dubbing.
TAPE:	1" wide, 1 mil mylar base video tape. 3000 ft. for 1 hr. recording time on 9¾" reel.	1" wide, 1 mil mylar base video tape. 3000 ft. for 1 hr. recording time on 9¾" reel.
CASE:	Vinyl clad sheet aluminum with die cast end frames; sturdy integrated handles. Hinged, removable dust cover of similar construction has smoked plexiglass window for observing machine during operation.	Vinyl clad sheet aluminum with die cast end frames; sturdy integrated handles. Hinged, removable dust cover of similar construction has smoked plexiglass window for observing machine during operation.
SIZE:	Overall 26¼" x 18¼" x 12¼".	Overall 26¼" (67 cm) long x 18¼" (46 cm) deep x 12¼" (31 cm) high.
WEIGHT:	85 lbs.	85 lbs. (39 kg.)
OPERATING POSITION:	Horizontal.	Horizontal.

VIDEO PERFORMANCE SPECIFICATIONS

FREQUENCY RESPONSE:	30 Hz to 4.2 MHz +1, -3db, high carrier mode.	25 Hz to 5 MHz ±2db, very high carrier mode.
SIGNAL TO NOISE:	-43db, Peak-to-Peak video to rms noise; -46db Peak-to-Peak composite signal to rms noise, high carrier mode.	-40db, Peak-to-Peak video to rms noise; -43db, Peak-to-Peak composite signal to rms noise, very high carrier mode.
DIFFERENTIAL PHASE & GAIN:	10° and 10% maximum, respectively.	10° and 10% maximum, respectively.
INPUT:	75 ohm unbalanced 0.5-1.5 V P-P, BNC or remote connector.	75 ohm unbalanced 0.5-1.5 V P-P, BNC or remote connector.
OUTPUT:	75 ohms unbalanced, 1.0 ±10% P-P, BNC type connector.	75 ohms unbalanced, 1.0 ±10% P-P, BNC type connector.

INPUTS & OUTPUTS

SYNC

INPUT:	75 ohm unbalanced 4.0 V P-P nominal, BNC type connector. (Use of sync input switches servo systems from video input or internal references.)	75 ohm unbalanced 4.0 V P-P nominal, BNC type connector. (Use of sync input switches servo systems from video input or internal references.)
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AUDIO TRACKS 1 & 2 PERFORMANCE SPECIFICATIONS

FREQUENCY RESPONSE:	±4db, 75 Hz to 12 KHz.	±4db, 75 Hz to 12 KHz.																		
SIGNAL TO NOISE:	-45db, @ 3.0% T.H.D.	-45db, @ 3.0% T.H.D.																		
FLUTTER & WOW	Flutter less than 0.18% rms, .5-250 Hz. Wow: less than .04% rms, .5-6 Hz. Measured according to ASA standards.	Flutter less than 0.18% rms, .5-250 Hz. Wow: less than .04% rms, .5-6 Hz. Measured according to ASA standards.																		
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OUTPUTS:	LINE: 600 ohms balanced, +4dbm level, XLR-3 type connector.	600 ohms balanced, +4dbm level, XLR-3 type connector.																		
SPEAKER/HEADPHONES:	2 watts into 8 ohms (use of speaker/headphones output silences internal speaker).	2 watts into 8 ohms (use of speaker/headphones output silences internal speaker).																		

Specifications subject to change without notice.

U.S. Sales Offices in: CALIFORNIA, Los Angeles (213) 240-5000 • GEORGIA, Atlanta (404) 451-7112 • ILLINOIS, Chicago (312) 593-6000 • MARYLAND, Bethesda (301) 530-8800 • MASSACHUSETTS, Boston (617) 890-2040 • NEW JERSEY, Hackensack (201) 489-7400 (in New York City 736-6116) • OHIO, Dayton (513) 254-6101 • PENNSYLVANIA, Philadelphia (215) 887-7650 • TEXAS, Dallas (214) 637-5100 • Sales and Service Companies throughout the world.

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